12

Find: [   ] 14

Web & Usenet | Web | Usenet | Press | Images | Citations | Journals | Tech | All

16

(Hide) Constraints:

Locality: [Any ▼] Age limit: [None ▼] Depth: [Any ▼] Images: [Any ▼]

(Hide) Options:

20

Hits: [100 ▼] Context: [100 ▼] Cluster: [No ▼] Tracking: [No ▼]

Tip: Not using the options above? Click on the "hide" links to save screen space.

| Tomorrow at NECI	
	CS Talk: "Visual Homing: Surfing on the Epipoles", Ilan Shimshoni, The Technion, (DWJ) - Multipurpose Room 2F01, 2nd Floor
10:30	This is joint work with Ronen Basri and Ehud Rivlin. We introduce a novel method for visual homing. Using this method a robot can be sent to desired positions and orientations in 3-D space specified by single images taken from these positions. Our method is based on recovering the epipolar geometry relating the current image taken by the robot and the target image. Using the epipolar geometry, most of the parameters which specify the differences in position and orientation of the camera between the two images are recovered. However, since not all of the parameters can be recovered from two images, we have developed sp...
2:30	Lexical Semantics and Information Retrieval Discussion Group Meeting. Coordinator, Robert Krovetz - Board Room 4D09, 4th Floor
OUT	Aeppli, Altshuler, Anupindi, Ebbesen, Gottlieb, Omohundro, de Ruyter

Coverage WRT Estimated "Indexable Web" Size

■ Estimated Total
■ HotBot
  Excite
▩ Northern Light
■ AltaVista
▩ Infoseek
■ Lycos
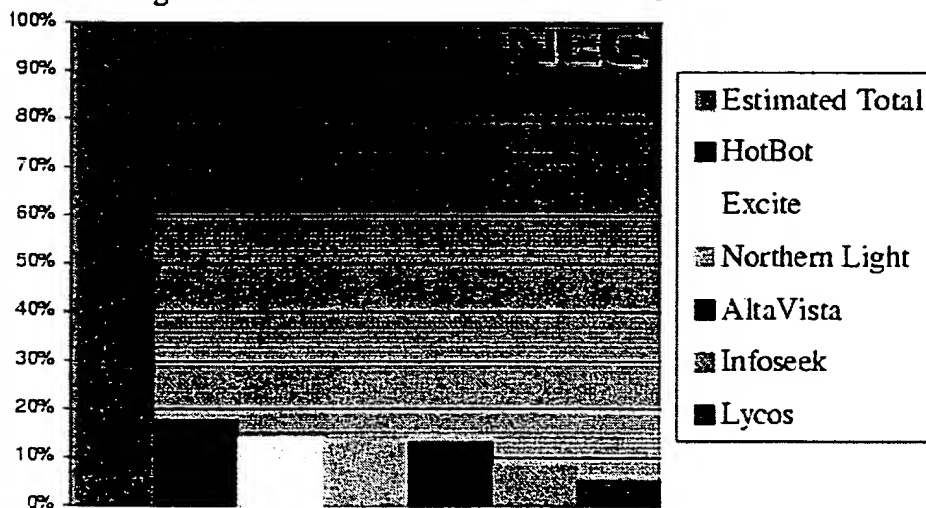
Figure 1. Home page of the NECI meta search engine.

Options:

Individual page timeout: `30 ▼`
Filter pages to highlight hits when viewing full page: `Yes ▼`
Filter images from the pages when viewed: `Keep ▼`
Display pages for each query in the same or a new window: `Same ▼`
Image classification: `Yes ▼`
Add URL to track: `[                    ]`

Update Options

22 ↗

Queries being tracked:

"search engine"   Press   [Stop tracking query]   ←——— 24
signafy   Press   [Stop tracking query]

URLs being tracked:

Page   **http://cesdis.gsfc.nasa.gov/linux/drivers/vortex.html**   [Stop tracking URL]
Page   **http://www.linuxhq.com/kpatch21.html**   [Stop tracking URL]
Page   **ftp://ftp.cygnus.com/pub/egcs/releases/**   [Stop tracking URL]   ←——— 26
Page   **http://www.neci.nj.nec.com/homepages/giles/**   [Stop tracking URL]
Page   **ftp://ftp.kernel.org/pub/linux/kernel/v2.1/**   [Stop tracking URL]

Description of the options on the main page:

Hits: Maximum number of hits to display excluding duplicates

Context: Number of context characters to show either side of the query terms

Cluster: Cluster documents after retrieval

Tracking: Start tracking this query and tell me when new documents appear which match the query

Locality: Only show documents in this domain

Age limit: Filter out documents older than the specified age

Depth: Only show documents with a given subdirectory depth

Images: Filter images and only show photos or graphics

Figure 2. Options page of the NECI meta search engine.

Find: nec and "digital watermark"

Web & Usenet | Web | Usenet | Press | Images | Citations | Journals | Tech | All

(Show) Constraints
(Hide) Options

Hits: [100] Context: [100] Cluster: [No] Tracking: [No]

Searching for: +nec +"digital watermark" using: HotBot Infoseek AltaVista Excite Lycos Northern Light Yahoo WebCrawler.

Tip: The query term links in the "Searching for" line lead to the Webster dictionary definitions.

■■□ Ingemar Cox Home Page I 1m 13k http://www.neci.nj.nec.com/homepages/ingemar/ingemar.html
...http://www.neci.nj.nec.com/homepages/ingemar/ingemar.html... /...ar Cox Home Page Ingemar J. Cox Sr. Research Scientist, Computer Vision , NEC Research Institute My most recent work has focused on the development of statistical framewor... /...r investigation include face recognition, and stereo correspondence problems. Address NEC Research Institute 4 Independence Way Princeton, NJ 08540, USA Office: 609-951-2722 Fax... /... My most recent work has focused on the development of statistical frameworks for motion analysis, digital watermarking and content-based image database retrieval. Other projects currently under investigation includ...

■□ NECI Technical Report 95-10 I 1y 2k http://www.neci.nj.nec.com/tr/neci-abstract-95-10.html
...NECI Technical Report 95-10... ...http://www.neci.nj.nec.com/tr/neci-abstract-95-10.html... /... NECI Technical Report 95-10 NECI Technical Report 95-10 NEC Research Institute, 4 Indepe... /... Ingemar J. Cox, Joe Kilian, Tom Leighton, and Talal Shamoon. December 4, 1995. We describe a digital watermarking method for use in audio, image, video and multimedia data. We argue that a watermark must be p... /...n, including dithering and recompression and rotation, translation, cropping and scaling. The same digital watermarking algorithm can be applied to all three media under consideration with only minor modifications, ...

■□ Mass High Tech I n/a 4k http://boston.com/mht/issue/w81296/index.html
... sites Netscape Bonds With Apple. Netscan Netscape Bonds With Apple JEM adds NEC to its online factory outlet Local science teachers Access Excellence A digitized play... /... Lead Stories August 12-17, 1996 This Week In Mass High Tech ARIS says it's on key with digital watermark is right on tune Info highway rest stops CAT's meow of Web sites Netscape Bond...

□ BU CAS CS 585: Image and Video Computing --- Syllabus I n/a 6k
http://www.cs.bu.edu/faculty/sclaroff/courses/cs585/syllabus.html
... Cox, J. Kilian, T. Leighton, and T. Shamoon, Secure Spread Spectrum Watermarking for Multimedia , NEC Research Institute Technical Report 95-10. M. Kass, A. Witkin, and D. Terzopoulos. Snakes: Acti... /...ions [1,2] Oct T 1 Edge detection C5 P1 due, P2 out R 3 Digital watermark, steganography [3] T 8 Edges, contours C6 R 10 Curve matchin...

■ SMH COMPUTERS February 20 1996 : Mark to foil Net pirates H n/a 2k
http://www.smh.com.au/computers/content/960220/news6-960220.html
...6 : Mark to foil Net pirates Week of February 20, 1996 Mark to foil Net pirates NEC researchers in the US have developed a "digital watermark" that can be attached to multimedia info... /...ing its owner beyond doubt in the case of a copyright dispute. Embedded in the data itself, NEC says it is "a mathematically derived code included in the frequency signals of the information sen... /...re multimedia information of dubious ownership is proliferating. The code is invisible to users and NEC is confident it cannot be found and stripped out by multimedia pirates. It is embedded in ... /... February 20, 1996 Mark to foil Net pirates NEC researchers in the US have developed a "digital watermark" that can be attached to multimedia information, identifying its owner beyond doubt in the case of...

[...section deleted...]

Figure 3. First portion of a sample response of the NECI meta search engine for the query nec and "digital watermark".

299.974 ■ NEWSbytes A 1y 36k http://nccr.monitor.ca/monitor/issues/vol3iss7/newsbytes.html
...torola licenses Apple OS Apple CEO reveals new strategy Chess: Kasparov beats Deep Blue NEC 'Digital Watermark' technology Week of February 12 - February 16 / 1996 New Fax stand... /...-around won't come cheap ENIAC to run on 50th anniversary Mitel demos USB phone-computer connection Previous Page / Next Page Week of March 4 - March 8 /... /...ely, and productively. The products offered by the Small Business Unit will reportedly let users connect to the Internet as well as create corporate intranets to link the businesses with their customers... /...a licenses Apple OS Apple CEO reveals new strategy Chess: Kasparov beats Deep Blue NEC 'Digital Watermark' technology Week of February 12 - February 16 / 1996 New Fax standard to incorporate ... /...he third and fourth were draws. and Kasparov won the last two games. Back to top NEC 'Digital Watermark' technology [February 20/96] NEC Corporation has developed technology that will digitally mark... /...eo, and multimedia data as well as text and images. Unlike conventional encryption systems, the digital watermark stays embedded in the data and remains unaffected by digital-analogue conversions. image scaling o...

299.931 ■ tigermarktwo.html A 7m 4k http://intermedia-design.com/tigermarktwo.html
... tigermarktwo.html NEC TigerMark DataBlade Module for Images From Informix and NEC What is Watermarking? ... /... NEC TigerMark DataBlade Module for Images From Informix and NEC What is Watermarking? With the advent of digital communication, including the I... /...ng the Internet, make it easy to transmit and redistribute perfect copies of digital data. Now with NEC is TigerMark technology, you can custom watermark your images permanently and securely. without de... /...es permanently and securely. without degrading the quality of the content. NEC has developed a digital Watermarking technology that solves this problem for today is content providers. NEC is TigerMark is a digit... /...crever your content goes, your watermark goes. too. NEC provides a powerful tool Digital watermark NEC has developed a digital Watermarking technology that meets the needs of today is busines... /...s. too. NEC provides a powerful tool Digital watermark NEC has developed a digital Watermarking technology that meets the needs of today is business environment. NEC is digital watermark Tige...

299.89 ■ Focus on Internet H 1m 9k http://www.esi.es/Information/SWT/R_D/I196/four.html
...ERNET NEWS 24 HOURS IN CYBERSPACE PARTS OF INTERNET GO BLACK IN PROTEST OVER NEW LAW NEC DEVELOPS DIGITAL WATERMARK TECHNOLOGY INTERESTING SITES KFKI RESEARCH INSTITUTE FOR MEASUR... /...arian groups and individuals. Sunday February 11 This is an excerpt Source: Reuters NEC DEVELOPS DIGITAL WATERMARK TECHNOLOGY PRINCETON. N.J. - NEC says scientists at its NEC Research ... /...an excerpt Source: Reuters NEC DEVELOPS DIGITAL WATERMARK TECHNOLOGY PRINCETON, N.J. - NEC says scientists at its NEC Research Institute have developed a digital watermarking method for use... /...WS 24 HOURS IN CYBERSPACE PARTS OF INTERNET GO BLACK IN PROTEST OVER NEW LAW NEC DEVELOPS DIGITAL WATERMARK TECHNOLOGY INTERESTING SITES KFKI RESEARCH INSTITUTE FOR MEASUREMENT AND COMPUTING TECHNIQ... /...and individuals. Sunday February 11 This is an excerpt Source: Reuters NEC DEVELOPS DIGITAL WATERMARK TECHNOLOGY PRINCETON, N.J. - NEC says scientists at its NEC Research Institute have developed a ... /...K TECHNOLOGY PRINCETON, N.J. - NEC says scientists at its NEC Research Institute have developed a digital watermarking method for use in protecting copyrighted audio. image, video and multimedia data. The company s...

[...section deleted...]

Figure 4. Second portion of a sample response of the NECI meta search engine for the query nec and "digital watermark", showing the pages ranked according to the relevance measure (equation 1) which includes term proximity information.

☐ ARIS Technologies' Homepage H 16d 2k http://www.musicode.com/welcome.html
... ARIS Technologies' Homepage ARIS Technologies is an industry leader in **digital watermarking**. We deal exclusively with protecting intellectual property such as audio, video, and multimedia...

☐ Psych 267 Final Projects A n/a-8k http://white.stanford.edu/~heeger/psych267/final.html
...nteractive lighting design. Proceedings Eurographics '95, p. 229-240, 1995 (preprint). **Digital watermark**. References: Cox, Kilian, Leighton and Shamoon, "A Secure. Imperceptible yet Perceptually sal... /..., IBM Tech. Report (preprint available). Further links to other papers and resources on **digital watermarks**. Face recognition with "eigenfaces". References: Turk and Pentland, "Face recognition u...

☐ Digimarc receives funding of $4.5M. N n/a 6k http://www.nlsearch.com/cgi-bin/pdserv.pl?cbrecid=YY199704250301630598&ho=typhoon&po=5005
... Summary: First licensee is Adobe. Digimarc, the company that last year announced its Imagemarc **digital watermark** technology, seems to be ready to make its move in the market. ...

☐ Newsbytes Daily Summary N ** 0d ** 28k http://newsbytes.mpx.com.au/newsbytes/daily.html
.... Lemout & Hauspie [NASDAQ:LHSPF] (L&H) of Burlington, Massachusetts, and Ieper, Belgium. CHIPS NEC Develops World's Smallest Transistor TOKYO, JAPAN, 1997 SEP 11 (NB) - By Martyn Williams. NEC Co... /...PS NEC Develops World's Smallest Transistor TOKYO, JAPAN, 1997 SEP 11 (NB) - By Martyn Williams. NEC Corporation [TOKYO:6701] says it has developed the world's smallest operational transistor, a me... /...te length of 14 nanometers (14 millionths of a millimeter). The achievement was reached as part of NEC's development of a 10 terabit memory chip. Intel Advances Mobile PC Platform HONG KONG. CHINA....

☐ A letter from the publisher TIME, December 6, 1971 L 1y 3k http://electron.rutgers.edu/~myadav/war71/wall/dec6a.html
...tough warning to India. But the only evidence of war that night was the blackout which was quite unnecessary." From the correspondents' files, and from background research assembled by Reporter-Res...

Figure 5. Third portion of a sample response of the NECI meta search engine for the query nec and "digital watermark", showing pages where only one of the query terms was found.

13

Article Two H ly lk http://miavx1.muohio.edu/~whittijs/articletwo.html
0 Userdir rule failure The server was unable to resolve the requested / username reference, possible causes include:
Username invalid Server is unable to determine username's login directory due to insufficient privilege to

Jonathan G.Campbell, University of Ulster, N. Ireland, WWW Links I n/a lk http://www.iscm.ulst.ac.uk/~jon/book/
0 J.G. Campbell's Bookmarks From 27 August 1997 this page is *permanently* relocated to
http://www.infm.ulst.ac.uk/ jgc/book Updated 27 August 1997 - JG.Campbell@ulst.ac.uk

CIOS/Comserve WWW server address has changed L 5m lk
http://cios.llc.rpi.edu:4997/mailboxes/comgrads\08085104.118
CIOS/Comserve WWW server address has changed The CIOS web server address has changed. It is now
http://www.cios.org Please note too the new email address for the Comserve email interface to

DEFINE IMAGE L 9m 2k http://iram.fr/doc/sic/node58.html
0 DEFINE IMAGE Next: DEFINE /LIKE Up: DEFINE Previous: DEFINE HEADER DEFINE IMAGE DEFINE
IMAGE Var1 File1 Key1 [Var2 File2 Key2 [...]] [/GLOBAL]

Arizona Off-Road L 3m 3k http://www.azoffroad.com
0 Arizona Off-Road   1833 W. Mountain View Road Phoenix, AZ 85021 ATC's MOTORCYCLES JET SKIS GO
CARTS

Résultats dans les cantons L 21d 5k http://www.admin.ch/ch/f/pore/va/19840226/can316.html
0 Votation no 316 - Résultats dans les cantons Tableau récapitulatif / deutsch Votation no 316 Résultats dans les
cantons Arrêté fédéral concernant la perception d'une redevance sur le trafics des poids lourds du 24 juin 19

"We Know How the Parisians Felt" L ly 6k http://electron.rutgers.edu/~myadav/war71/wall/dec27b.html
0 "We Know How the Parisians Felt" "We Know How the Parisians Felt" Section: Box ,Page, TIME, Dec. 27, 1971
Time Correspondent Dan Coggin, who covered the war from Pakistani side, was in Dacca when that city
surrendered. His repor

The U.S. : A Policy in Shambles L ly 6k http://electron.rutgers.edu/~myadav/war71/wall/dec20b.html
0 The U.S. : A Policy in Shambles The Nixon Administration drew a fusillade of criticism last week for its policy on
India and Pakistan. Two weeks ago, when war broke out between two traditional enemies, a State Department
spokesman issued

ClariNet Tearsheet: Government, Business, and General News N ** 0d ** 8k http://www.clari.net/Samples/nb-other.html
0 ClariNet Tearsheet: Government, Business, and General News ClariNet * ClariNet Tearsheet: Government,
Business, and General News ClariNet Tearsheet: Government, Business, and General News This summary of
computer and technology news is

Figure 6. Fourth portion of a sample response of the NECI meta search engine for the query nec and "digital
watermark", showing pages where none of the query terms were found.

■ **Vol. 1, No. 19** A 1y 18k http://www.media.sbexpos.com/BULL/BUL0119.HTM

■ **Alternate** H 1y 18k http://www.seyboldreport.com/BULL/BUL0119.HTM

...ore than five million members Presstek floats additional stock Pearlsetters launched in Europe NEC announces **digital watermark** Oracle to include software suite with Internet box Ca... /...-BT have launched Presstek's Pearlsetters in seven European countries. Reuters reports that **NEC** claims to have developed a digital watermark system that could protect digital files... /...n members Presstek floats additional stock Pearlsetters launched in Europe **NEC** announces **digital watermark** Oracle to include software suite with Internet box Canon combines divisions within an I... /...ters in seven European countries. Reuters reports that **NEC** claims to have developed a **digital watermark** system that could protect digital files, such as still images. video and audio. from unauth...

□ **(http://www.videodiscovery.com/vdyweb/dvd/dvdfaq.txt)** H 1m 118k

http://www.videodiscovery.com/vdyweb/dvd/dvdfaq.txt

...a on NTSC line 21. The digital standard (CGMS/D) is not yet finalized, but will apply to digital connections such as IEEE 1394/Firewire. 3) Because of the potential for perfect digital copies, paranoid... /...isplaying it. No unscrambled digital output is allowed until work in progress for secure digital connections is finished. On the computer side, DVD-ROM drives and video display/decoder hardware or softw... /...d a PCM audio track. (Other streams such as Dolby Digital audio, MPEG audio, and subpicture are not necessary for the simplest case.) Basic DVD control codes are also needed. At the moment it's difficul... /...doing this, but it's possible. The music industry is also requesting an "embedding signalling" or "**digital watermark**" copy protection feature. This applies a digital signature to the audio in the form of supposedly ...

■ **Hyflex J1 Launch** H 3m 3k http://jpn.co.jp/jan96/jp14.html

■ **Hyflex J1 Launch** H 3m 3k http://jpn.co.jp/feb96/jp14.html

... Hyflex J1 Launch **NEC** Develops **Digital Watermark**ing Technique JPN Scientists at **NEC** Research Institut... /...nch **NEC** Develops **Digital Watermarking** Technique JPN Scientists at **NEC** Research Institute in Princeton, NJ, have developed a digital watermarking method that could be us... /...ary information is increasingly an issue," said Tatsuo Ishigoro, associate senior vice president of **NEC** Corp. "...I am convinced that our watermarking technique is a solution that will be welcomed espec... /... Hyflex J1 Launch **NEC** Develops **Digital Watermarking** Technique JPN Scientists at **NEC** Research Institute in Princeton, NJ, have de... /...ique JPN Scientists at NEC Research Institute in Princeton, NJ, have developed a **digital watermarking** method that could be used to protect the copyright of images and music on the Internet. Con... /...e is no way to track its reproduction and therefore it provides little protection against piracy. A **digital watermark**, however, can protect a copyright by means of an invisible identification code that is permanently...

■ **Internet** H n/a 20k http://net.info.nl/ui/0296/internet.html

...tscape servers. Dit kwam o.a. door het feit dat bepaalde optionele onderdelen zoals een database-connector duur betaald moeten worden. Microsoft op zijn beurt deed daar weer een schepje bovenop door we... /...://www.microsoft.com/infoserv http://www.microsoft.com/windows http://www.netscape.com **NEC** ontwikkelt **Digital Watermark** Technology **NEC** is in zijn computerlaboratoriums bezig met een digit... /...microsoft.com/windows http://www.netscape.com **NEC** ontwikkelt **Digital Watermark** Technology **NEC** is in zijn computerlaboratoriums bezig met een digitaal watermerk. Dit watermerk moet in de toekom... /...t.com/infoserv http://www.microsoft.com/windows http://www.netscape.com **NEC** ontwikkelt **Digital Watermark** Technology **NEC** is in zijn computerlaboratoriums bezig met een digitaal watermerk. Dit watermerk ...

Figure 7. Fifth portion of a sample response of the NECI meta search engine for the query nec and "digital watermark", showing pages which contained duplicate context strings to pages found earlier.

Error 404 Not found - file doesn't exist or is read protected [even tried multi] Digital Image Watermarking: Main Project Page http://www.csuglab.cornell.edu/Info/People/vbadari/cs631/wmrkproj/project.html

Error 404 Not found Labeling Techniques for Multimedia Data: http://www-it.et.tudelft.nl/pda/smash/public/benelux_cr.html

Error 404 Not found Labeling Techniques for Multimedia Data: http://www-it.et.tudelft.nl/pda/smash/public/benlx96/benelux_cr.html

Error 404 Not Found Artisoft Inc. -- Industry Awards and Recognition http://artisoft.com/main/overview/awards.html

Error 404 File Not Found The Rutgers Review http://electron.rutgers.edu/~nebus/

This search: +nec +"digital watermark"   Search engine pages: AltaVista   Page 2   Page 3   Excite   Page 2   HotBot   Page 2   Infoseek   Lycos   Northern Light   Page 2   WebCrawler   Yahoo

Query expansion (adding these words to the query may help): **digitally** (16)   **digitized** (16)   **digit** (9)   **digitale** (8) **digitaal** (8)   **digitization** (5)   **digits** (3)   **digitize** (3)   **watermarking** (463)   **watermarks** (127)   **watermarked** (50)

Engine	Response	Total	Retrieved	Processed	Duplicates
AltaVista	Yes	29	29	29	11
Excite	Yes	26	26	26	13
HotBot	Yes	39	39	33	5
Infoseek	Yes	19	19	17	0
Lycos	Yes	10	10	10	0
Northern Light	Yes	50	50	33	19
WebCrawler	Yes	1	1	0	0
Yahoo	Yes	0	0	0	0
Total		174	174	148	48

More documents were found but the maximum number of hits was reached.

2 terms: 70   1 term: 5   0 terms: 11   duplicate context: 9   invalid link: 5

Figure 8. Sixth (and final) portion of a sample response of the NECI meta search engine for the query nec and "digital watermark", showing the summary information including the number of results from each individual engine, etc.

40

▫ NECI Technical Report 95-10

▣ NEC Research Institute, 4 Independence Way, Princeton, NJ 08540.

Secure Spread Spectrum Watermarking for Multimedia

Ingemar J. Cox, Joe Kilian, Tom Leighton, and Talal Shamoon. December 4, 1995.

We describe a ▣ digital watermarking method for use in audio, image, video and multimedia data. We argue that a watermark must be placed in perceptually significant components of a signal if it is to be robust to common signal distortions and malicious attack. However, it is well known that modification of these components can lead to perceptual degradation of the signal. To avoid this, we propose to insert a watermark into the spectral components of the data using techniques analogous to spread sprectrum communications, hiding a narrow band signal in a wideband channel that is the data. The watermark is difficult for an attacker to remove, even when several individuals conspire together with independently watermarked copies of the data. It is also robust to common signal and geometric distortions such as digital-to-analog and analog-to-digital conversion, resampling, and requantization, including dithering and recompression and rotation, translation, cropping and scaling. The same ▣ digital watermarking algorithm can be applied to all three media under consideration with only minor modifications, making it especially appropriate for multimedia products. Retrieval of the watermark unambiguously identifies the owner, and the watermark can be constructed to make counterfeiting almost impossible. Experimental results are presented to support these claims.

Figure 9. Sample page view for the NECI meta search engine. The query terms are highlighted and the links at the top jump directly to the first occurrence of the respective query terms.

50

Figure 10. Simplified control flow of the meta search engine. Interactions with the page retrieval daemon are shown in gray.

Figure 11. Simplified control flow for image meta search. Interactions with the page retrieval daemon are shown in gray.

Find: koala

Web & Usenet Web Usenet Press Images Citations Journals Tech All

(Hide) Constraints

Locality: Any ▼ Age limit: None ▼ Depth: Any ▼ Images: Photos ▼

(Hide) Options

Hits: 100 ▼ Context: 100 ▼ Cluster: No ▼ Tracking: No ▼

Searching for: koala using: WebSeer Corel Lycos Yahoo HotBot AltaVista.

Tip: The bar to the left of the titles is longer when the query terms are closer together in the document.

KOALA RESEARCH 1995

More images were found but the maximum number of hits was reached.

Figure 12. First portion of a sample response of the NECI meta search engine for the query koala in the image databases, filtered for photos.

This search: koala   Search engine pages: AltaVista Images   Corel Images   HotBot Images   Page 2   Page 3   Page 4   Page 5   Page 6   Lycos Images   Page 2   Page 3   Page 4   Page 5   WebSeer   Yahoo Images

Engine	Response	Total	Retrieved	Processed	Duplicates
AltaVista Images	Yes	0	0	0	0
Corel Images	Yes	7	7	7	0
HotBot Images	Yes	5511	125	99	1
Lycos Images	Yes	222	80	85	1
WebSeer	Yes	0	0	0	0
Yahoo Images	Yes	4	4	4	1
Total		5744	216	195	3

More documents were found but the maximum number of hits was reached.

Filtered due to size: 12   Filtered due to type: 21

Figure 13. Second portion of a sample response of the NECI meta search engine for the query koala in the image databases, filtered for photos.

Find: `koala`

Web & Usenet | Web | Usenet | Press | Images | Citations | Journals | Tech | All

(Hide) Constraints:

Locality: `Any` ▼ Age limit: `None` ▼ Depth: `Any` ▼ Images: `Graphic` ▼

(Hide) Options:

Hits: `100` ▼ Context: `100` ▼ Cluster: `No` ▼ Tracking: `No` ▼

Searching for: koala using: WebSeer Corel Lycos Yahoo HotBot AltaVista

Tip: You can search for links to a specific page, e.g. link:www.neci.nj.nec.com/homepages/giles. Self links are excluded.
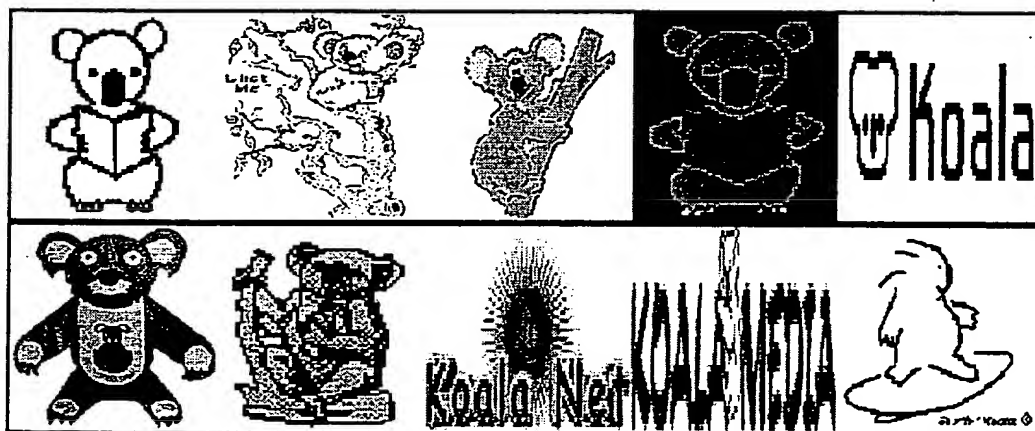
More images were found but the maximum number of hits was reached.

This search: koala   Search engine pages: AltaVista Images   Corel Images   HotBot Images   Lycos Images   Page 2   Page 3   Page 4   Page 5   Page 6   Page 7   WebSeer   Yahoo Images

Engine	Response	Total	Retrieved	Processed	Duplicates
AltaVista Images	Yes	0	0	0	0
Corel Images	Yes	7	7	7	0
HotBot Images	Yes	0	0	0	0
Lycos Images	Yes	217	120	128	5
WebSeer	Yes	0	0	0	0
Yahoo Images	Yes	4	4	4	1
Total		228	131	139	6

More documents were found but the maximum number of hits was reached.

Filtered due to size: 2   Filtered due to type: 61

Figure 14. Sample response of the NECI meta search engine for the query koala in the image databases, filtered for graphics.

Clusters:

university of texas
artificial neural networks
jos nelson amaral
classifiers kagan tumer
department of electrical
combined neural classifiers
applying genetic algorithms
hybrid intelligent architecture OR hybrid intelligent architecture AND systems
radial basis function
classifier boundary distributions
estimating the bayes
boundaries in linearly
pattern recognition
tx 78712
ismail taha
kagan pine
international conference
systems
abstract
paper
austin
ece
utexas

Figure 15. Clusters for the query "joydeep ghosh".

university of texas

Document:...by clicking on . Journal Papers: Ismail Taha and **Joydeep Ghosh**, ``A Hybrid Intelligent Architecture and Its Application to Water Reservo... /...d to Journal of Smart Engineering Systems . Ismail Taha and **Joydeep Ghosh**, ``Symbolic Interpretation of Artificial Neural Networks,'', submitted ... /... Austin, 1996. Conference Papers: Ismail Taha and **Joydeep Ghosh**, ``Evaluation and Ordering of Rules Extracted from Feedforward Networks,... /...Also, Tech. Rep. TR-97-01-106, The Computer and Vision Research Center, **University of Texas**, Austin, 1996. Conference Papers: Ismail Taha an...

Document:...*Joydeep Ghosh*... /... **Joydeep Ghosh Joydeep Ghosh** Telephone: (512) 471-8980 Fax: (512) 471-5... /... **Joydeep Ghosh Joydeep Ghosh** Telephone: (512) 471-8980 Fax: (512) 471-5532 E-mail: ghosh@pin... /...Fax: (512) 471-5532 E-mail: ghosh@pine.ece.utexas.edu Address: The **University of Texas** at Austin Department of Electrical & Computer Engineering...

Document:...Yoan Shin and *Joydeep Ghosh* Department of Electrical and Computer... /...Yoan Shin and Joydeep Ghosh Department of Electrical and Computer Engineering The **University of Texas**... /...in and Joydeep Ghosh Department of Electrical and Computer Engineering The **University of Texas** at Austin Austin, TX 78712 Abstract This paper introduces a nov...

...more...

artificial neural networks

Document:... **Artificial Neural Networks** Authors: Bryan W. Stiles and **Joydeep Ghosh** Department of Electrical and Computer Engineering The Unive... /...rsity of Texas at Austin Correspondence: Bryan Stiles c/o **Joydeep Ghosh** Department of Electrical and Computer Engineering The Unive... /...Phone: (512) 471-2358 Email: bstiles@pine.ece.utexas.edu **Joydeep Ghosh** Department of Electrical and Computer Engineering The Univ... /... A Habituation Based Mechanism for Encoding Temporal Information in **Artificial Neural Networks** Authors: Bryan W. Stiles and Joydeep Ghosh Department o... /...l: ghosh@pine.ece.utexas.edu Submit to: Applications and Science of **Artificial Neural Networks** Steven K. Rogers and Dennis W. Ruck at AeroSense '9...

Document:... (eds.), IEEE Press. 1995. pp 135 - 144. Bryan W. Stiles and **Joydeep Ghosh**, "A Habituation Based Mechanism for Encoding Temporal Information in Arti... /...E Proc. Vol. , Orlando, April 1995, pp. Bryan W. Stiles and **Joydeep Ghosh**, "Habituation Based Neural Classifiers for Spatio-temporal Signals", Pro... /...Proc. ICASSP-95, Detroit, May 1995, pp. Bryan W. Stiles and **Joydeep Ghosh**, "Dynamic Neural Networks for the Classification of Oceanographic Data",... /...Ghosh, "A Habituation Based Mechanism for Encoding Temporal Information in **Artificial Neural Networks**", (invited paper) Proc. SPIE Conf. on Applications and Science of Artif... /...tworks", (invited paper) Proc. SPIE Conf. on Applications and Science of **Artificial Neural Networks** IV, SPIE Proc. Vol. , Orlando, April 1995, pp. Bryan W. St...

Document:...uth.edu Larry D. Jackel Robert E. Schapire Y. Freund Kagan Tumer and **Joydeep Ghosh** Shimon Edelman Jonathan Baxter Anders Krogh and Jesper Vedelsby ... /...ftp from "ftp://eris.wisdom.weizmann.ac.il/pub/mam.ps.Z" Kagan Tumer and **Joydeep Ghosh**, "Theoretical Foundations of Linear and Order Statistics Combiners for Ne... /...When Networks Disagree: Ensemble Methods for Neural Networks", Chapter 10, **Artificial Neural Networks** for Speech and Vision, editor R.J. Mammone, Chapman-Hall, London 1993 M....

...more...

Figure 16. The first two cluster summaries for the query "joydeep ghosh".

HUSKY SEARCH

Query: (joydeep ghosh)

Documents: 102, Clusters: 14, Average Cluster Size: 11.21 documents

Document Group	Size	Phrase and Sample Document Titles
Cluster 1	19	Artificial (74%), Hybrid intelligent (32%), domain knowledge (26%) ORGANIZING COMMITTEE Untitled Abstract Abstract Untitled
Cluster 2	7	Click on to view the abstract and on to obtain a postscript copy... (71%), postscript copy of the full paper (100%), paper is currently not available. (57%) Kagan Tumer's Publications Classification Working Papers Refereed Archival Journal Publications (Full/Regular Papers) Technical Reports
Cluster 3	15	Kagan tumer (100%), NEURAL CLASSIFIERS Kagan Tumer and Joydeep ghosh (27%), pattern classifiers (20%), tumer (53%) Untitled Untitled Abstract Abstract Abstract
Cluster 4	8	of Electrical and Computer (88%) Untitled Untitled LANS Home Page Joydeep Ghosh LANS Home Page
Cluster 5	31	e.ece (32%), RESEARCH & EDUCATIONAL RESOURCES/ ORGANIZATIONS/ centers (10%), of Texas (10%), er (81%) Untitled Untitled Batch_92 Chemical Engineering LANS Home Page Joydeep Ghosh
Cluster 6	12	University of Texas at austin (50%), University of texas (67%), texas (100%) Untitled Untitled LANS Home Page Joydeep Ghosh Joydeep Ghosh
Cluster 7	3	ters. Journal (100%) LANS Home Page Refereed Archival Journal Publications (Full/Regular Papers) Refereed Archival Journal Publications (Full/Regular Papers)

Figure 17. First part of the clusters for the query "joydeep ghosh" from HuskySearch.

Document Group	Size	Phrase and Sample Document Titles
Cluster 8	16	**papers (100%)** Kagan Tumer's Publications Classification Kurt's Publications Working Papers Refereed Archival Journal Publications (Full/Regular Papers)
Cluster 9	2	**ons. Books (100%)** LANS Home Page Books/Proceeding... (Edited)
Cluster 10	8	**(100%)** LANS Home Page Associated Members LANS Home Page Associated Members No Title
Cluster 11	4	**s, Austin (100%)** Untitled LANS Home Page LANS Home Page No Title
Cluster 12	11	**combining (100%), outputs (64%)** Abstract Abstract Abstract Untitled Abstract
Cluster 13	8	**ted (100%)** LANS Home Page Kagan Tumer's Publications CIS Publications Database Kurt's Publications Refereed Archival Journal Publications (Full/Regular Papers)
Cluster 14	13	**e (100%)** LANS Home Page Joydeep Ghosh JOYDEEP GHOSH Joydeep Ghosh LANS Home Page
Unclustered	3	Musical Events n Mumbai Batch-Wise Mailing Lists and Home Pages for IITK Publicações de José Nelson Amaral

Figure 18. Second part of the clusters for the query "joydeep ghosh" from HuskySearch.

Refine your search by requiring a few relevant topics, excluding irrelevant ones, and ignoring the others

[...] ☑ 26% **Ghosh**, neural, artificial, networks, sonar, austin, classification, texas, signals

[...] ☑ 24% **Orthod**, orthodontics, orthodontic, orthop, orthodontists, mandibular, maxillary, nanda, craniofacial

[...] ☑ 23% **Classifiers**, kagan, classifier, combiners, combining, recognition, pattern, proceedings, ensemble

[...] ☑ 18% **Dds**, dmd, bds, incisors, msd, phd

[...] ☑ 16% **Ieee**, spie, associative, annealing

[...] ☑ 15% **Wavelets**, fuzzy, prof

[...] ☑ 14% **Molars**, maxilla, mandible

[...] ☑ 14% **Generalization**, supervised, adaptation, vol, estimation

[...] ☑ 12% **Ece**, electrical, engineering, utexas

Help . Preferences . New Search . Advanced Search

Figure 19. Clusters for the query "joydeep ghosh" from AltaVista.

Clusters:

artificial neural networks
networks neural networks
ieee international conference
university of texas
pacific northwest laboratory
recurrent neural networks
nnw in hep
pacific northwest national
university of california
austrian research institute
self organizing map
n rthwest national laboratory
artificial intelligence
pattern recognition
research group
international conference
fuzzy logic
san diego
genetic algorithms
ieee transactions
signal processing
pacific northwest
technical report
machine learning
data
nets
ai
software

Figure 20. Clusters produced by the NECI meta search engine for the query "neural network".

carpal tunnel syndrome
repetitive stress injuries
software monitoring tools
contain useful advice
repetitive strain injuries
san jose state OR san jose state AND archive
kinds of documents
university of nebraska
htm diana carroll
products include split
dan wallach
keyboard alternatives
interest finder OR browse groups
human factors
tifaq general
injuries
related
archive
resources
contain useful advice AND resources OR contain useful advice AND keyboard alternatives
repetitive stress injuries AND keyboard alternatives
repetitive stress injuries AND dan wallach

_86_

---

carpal tunnel syndrome

Document:...FAQ - *Typing* Injury ... /... Typing Injury FAQ Home Page [TIFAQ] [General] [Keyboards] [Speech] [Mice] [Sof... ...FAQ - *Typing Injury* ... /... Typing Injury FAQ Home Page [TIFAQ] [General] [Keyboards] [Speech] [Mice] [Software] ... /...Injury Archive. sources of information for people with typing injuries, repetitive stress injuries, carpal tunnel syndrome, etc.. The TIFAQ is targeted at computer users suffering at the hands of their equipment. You'...

Document:... JXM's Ergonomics Page is a site by John Murray at University of Michigan that focuses on typing injuries, carpal tunnel syndrome and design concepts. Office Working Postures is a comme... /...eral links to various safety oriented servers. lists, and newsgroups. You do the searching. Typing Injuries is everything you ever wanted to know about typing injuries by Dan Wallach at Princeto... /... Princeton. Lots of publications and links. Everything you wanted to know and more. Typing Injury Archive is a typing injury library by Dan Wallach at Princeton. Here you will find a well cate... /...ons and links. Everything you wanted to know and more. Typing Injury Archive is a typing injury library by Dan Wallach at Princeton. Here you will find a well categorized list of typing injury ... /... and Ergonomics Home Page links to several ergonomic sites that focus on safety issues, such as: carpal tunnel syndrome, back injuries, air quality, sick building syndrome, and lighting. Lawrence Livermore Lab ... /...al technology and human factors engineering. Mostly in-house work but an interesting site. Carpal Tunnel Syndrome is a commercial site but does have lots of references to CTS. Specific emphasis is on keyboard...

Document:...at the keyboard. Site offers Time Out For Windows, an ergonomic exercise break program. Typing Injury FAQ : This is the home page for the Typing Injury FAQ and Typing Injury Archive. ... /... an ergonomic exercise break program. Typing Injury FAQ : This is the home page for the Typing Injury FAQ and Typing Injury Archive. NEW! University of Minnesota Office Ergonomics... /...are, how one gets them, and some guidelines for how one may help heal oneself from this devastating injury. Carpal Tunnel Syndrome & Repetitive Stress Computer Related Repetitive St... /... Carpal Tunnel Syndrome & Repetitive Stress Computer Related Repetitive Strain Injury : I hope on this page to provide a very brief introduction to RSI for the benefit of students who... /...em, and some guidelines for how one may help heal oneself from this devastating injury. Carpal Tunnel Syndrome & Repetitive Stress Computer Related Repetitive Strain Injury : I hope on this page t... /...pause helps you avoid OOS / RSI with Micropauses and Exercise Breaks. Patient's Guide to Carpal Tunnel Syndrome : The following documents attempt to explain what Carpal Tunnel Syndrome is, how it is diagnosed....

Document:...*Typing* Injury FAQ: General Information... /... Typing Injury FAQ: General Information General Information [TIFAQ] [General] [Key... ...*Typing Injury* FAQ: General Information... /... Typing Injury FAQ: General Information General Information [TIFAQ] [General] [Keyboards]... /...nonym for RSI WRULD Work-Related Upper Limb Disorders - yet another synonym for RSI CTS Carpal Tunnel Syndrome (see below) Hyperextension Marked bending at a joint. Pronation Turning the palm down... /...over the wrist and forearm, some tenderness. and it gets worse with repetitive activity. Carpal Tunnel Syndrome the nerves that run through your wrist into your fingers get trapped by the inflamed mu...
...more...

Figure 21. Clusters produced by the NECI meta search engine for the query typing and injury along with the first cluster summary.

Find: what does NASDAQ stand for?

Web & Usenet Web Usenet Press Images Citations Journals Tech All

(Show) Constraints
(Hide) Options

Hits: 100 ▼ Context: 100 ▼ Cluster: No ▼ Tracking: No ▼

Searching for: "NASDAQ stands for" "NASDAQ is an abbreviation" "NASDAQ means" using: HotBot Infoseek AltaVista Excite Lycos Northern Light Yahoo WebCrawler.

Tip: For better precision with multiple terms you might like to use "+" to ensure that the results contain specific terms (e.g. +"lee giles" +optics).

Ref:...viation for the New York Stock Exchange AMEX is an abbreviation for the American Stock Exchange **NASDAQ is an abbreviation** for the National Association of Securities Dealers Automatic Quotation Exchange "Top 5% of the ...

Ref:...nformation on NASDAQ and the companies traded thereon. (Incidentally, does anyone know what **NASDAQ stands for?**) NYSE All about the N ew Y ork S tock E xchange. Data mongers loo...

Ref:...- The NASDAQ Last-Revised: 25 Oct 1996 From: billmanr@aol.com , jeffwben@aol.com , cml@cs.umd.edu **NASDAQ is an abbreviation** for the National Association of Securities Dealers Automated Quotation system. It is also commonl...

Ref:... NASDAQ Last-Revised: 25 Oct 1996 From: billmanr@aol.com , jeffwben@aol.com , lott@invest-faq.com **NASDAQ is an abbreviation** for the National Association of Securities Dealers Automated Quotation system. It is also commonl...

Ref:...ble for the operation and regulation of the NASDAQ stock market and overthecounter markets. **NASDAQ Stands for** the National Association of Securities Dealers Automated Quotation System. A nationwide computeri...

Ref:...site Index is a value weighted index that monitors more than 2,000 stocks traded over-the-counter. **NASDAQ stands for** National Association of Securities Dealers Automated Quotations. It has been available since 1971...

Ref:...as an incentive stock option under Section 422 of the Code. (k) **"NASDAQ" means** the National Association of Securities Dealers, Inc. Automated Quotation System...

[...section deleted...]

This search: "NASDAQ stands for" "NASDAQ is an abbreviation" "NASDAQ means"   Search engine pages:
AltaVista Excite HotBot Infoseek Lycos Northern Light WebCrawler Yahoo

Engine	Response	Total	Retrieved	Processed	Duplicates
AltaVista	Yes	9	9	9	1
Excite	Yes	24	24	24	1
HotBot	Yes	23	23	23	4
Infoseek	Yes	5	5	5	0
Lycos	Yes	0	0	0	0
Northern Light	Yes	0	0	0	0
WebCrawler	Yes	0	0	0	0
Yahoo	Yes	0	0	0	0
Total		61	61	61	6

3 terms: 0   2 terms: 0   1 term: 26   0 terms: 9   duplicate context: 14   cannot access: 3   invalid link: 3

Figure 22. NECI meta search engine response for the query What does NASDAQ stand for?

Ⓘinfoseek℠
proof of intelligent life on the net℠

92

Home I Add URL I Free Software I Help

White & Yellow Pages

UPS.
Global Services

Infoseek found 23,064,238 pages containing at least one of these words: what does NASDAQ stand for?

Related Topics	Search Results 1 - 10
Stocks	Hide Summaries I next 10
Personal investment	
Brokerages with online trading	**Stock Research NASDAQ - are you a shrewd investor? FREE copy of the best**
Financial market analysis	Stock Research NASDAQ - are you a shrewd investor? FREE copy of the best Stock Research NASDAQ. Be ahead of the Market, Stock Research NASDAQ that always call it right. Our ...
	72% http://www.updatenews.com/key/investresearch/ (Size 5.3K)

CyberLand HQ
CyBerCorp designs and develops real-time decision support, execution and trading systems for NASDAQ stock market traders. Be sure to check out CyBerTrader.
63% http://www.cyber-corp.com/ (Size 4.0K)

InvestQuest® AMUSEMENT & RECREATION SERVICES
AMUSEMENT & RECREATION SERVICES. [InvestQuest® Homel Company Listl Industriesl Company Search] ALLIANCE GAMING CORP (NASDAQ:ALLY) ALPHA HOSPITALITY CORP (NASDAQ:ALHY) AMERICAN ...
63% http://www.investquest.com/.html/79_industry.htm (Size 11.9K)

InvestQuest® INSURANCE CARRIERS
INSURANCE CARRIERS. [InvestQuest® Homel Company Listl Industriesl Company Search] 20TH CENTURY INDUSTRIES (NYSE:TW) ACCEL INTERNATIONAL CORP (NASDAQ:ACLE) ACCEPTANCE INSURANCE ...
62% http://www.investquest.com/.html/63_industry.htm (Size 26.8K)

InvestQuest® WHOLESALE TRADE--DURABLE GOODS
WHOLESALE TRADE--DURABLE GOODS. [InvestQuest® Homel Company Listl Industriesl Company Search] AAR CORP (NYSE:AIR) ABATIX ENVIRONMENTAL CORP (NASDAQ:ABIX) ACE HARDWARE CORP ...
62% http://www.investquest.com/.html/50_industry.htm (Size 24.2K)

Stocks by Symbol- C
Stocks by Symbol - C. C (NYSE) Chrysler CA (TSE) Canadian Airlines CANOTC%3AMGIS (OTC) Magisoft Software Corp. CAWS+ (NASDAQ) CAI Wireless Systems Inc. CBMI (NASDAQ) Creative ...
62% http://stockclub.com/stocks/symbol-c-index.html (Size 9.6K)

Stocks by Company Name - A
A+ Communications (NASDAQ:ACOM) A. G. Edwards (NYSE:AGE) Abatix Environmental (NASDAQ:ABIX) access health (NASDAQ:ACCS) acclaim (NASDAQ:AKLM) Ackerley Communications (NASDAQ:AK) ...
62% http://stockclub.com/stocks/name-a-index.html (Size 8.5K)

InvestQuest® RUBBER AND MISC. PLASTICS PRODUCTS
RUBBER AND MISC. PLASTICS PRODUCTS. [InvestQuest® Homel Company Listl Industriesl Company Search] ADVANCED MATERIALS GROUP INC (NASDAQ:ADMG) AEP INDUSTRIES INC (NASDAQ:AEPI) ...
62% http://www.investquest.com/.html/30_industry.htm (Size 10.6K)

InvestQuest® FABRICATED METAL PRODUCTS
FABRICATED METAL PRODUCTS. [InvestQuest® Homel Company Listl Industriesl Company Search] AAVID THERMAL TECHNOLOGIES INC (NASDAQ:AATT) ABC RAIL PRODUCTS CORP (NASDAQ:ABCR) ABS ...
62% http://www.investquest.com/.html/34_industry.htm (Size 13.3K)

InvestQuest® ENGINEERING & MANAGEMENT SERVICES
ENGINEERING & MANAGEMENT SERVICES. [InvestQuest® Homel Company Listl Industriesl Company Search] ADVANCED DETECTORS INC (OTC Bulletin Board:3ADET) AERO SYSTEMS ENGINEERING INC ...
62% http://www.investquest.com/.html/87_industry.htm (Size 15.8K)

Hide Summaries I next 10

Figure 23. Response of Infoseek for the query What does NASDAQ stand for?

Home. Options. Help. Suggestions. Problems. NECI meta search (13581 queries)

Find: how is a rainbow created?

Web. Usenet. Web. Usenet. Press. Images. Citations. Journals. Tech. All.

(Show) Constraints:
(Hide) Options:

Hits: 100 ▼ Context: 200 ▼ Cluster: No ▼ Tracking: No ▼

Searching for: "rainbow is created", "makes a rainbow created", "rainbow is produced", "rainbow is made" using: HotBot Infoseek AltaVista Excite Lycos Northern Light Yahoo WebCrawler.

Tip: For better precision with multiple terms you might like to use "+" to ensure that the results contain specific terms (e.g. +"lee giles" +optics).

Ref:.... the green flash. it helps to know how our atmosphere effects sunlight. Coincidentally, the phenomenon responsible for the green flash is also the one that paints rainbows across Hawaii's sky. A **rainbow is created** when rays of sunlight enter a raindrop, bounce around inside, and exit. Light from the sun consists of a potpourri of colors that are each bent by a different amount inside a raindrop. This unequa...

Ref:...scapes the raindrop after it is reflected once. A part of the ray is reflected again and travels along inside the drop to emerge from the drop. The rainbow we normally see is called the primary **rainbow and is produced** by one internal reflection the secondary rainbow arises from two internal reflections and the rays exit the drop at an angle of 50 degrees rather than the 42degrees for the red primary bow. ...

Ref:...e rainbow we do not see the sun, and we rarely see a rainbow in winter. How do we explain this appearance of a bow, double bows, size of arc, and brightness of the rainbow? Answer The **rainbow is produced** by sunlight passing through a raindrop or a collection of rain drops. A typical raindrop is spherical and as a light ray strikes the surface of the raindrop, some light is reflected and some passes ...

Ref:...se to us. He promised that the earth will never be destroyed again by a flood. As a sign of that promise He put a rainbow in the sky. Whenever we see a rainbow, we can think of God's promise. The **rainbow is made** up of all the colors. Back To Index Next Page... Page 1 ...

Ref:...two rainbows, the narrower male rainbow and the wider female. The male rainbow can not stop the rain by itself. When it is followed by the female the rain stops. Other Native Americans believe the **rainbow is made** from the souls of wild flowers that lived in the forest and lilies from the prairies. A Japanese myth tells of the first man Isanagi and the first woman Isanami who stood on the floating bri... /...te of samsara before the clear light of Nirvana or heaven. In Arabia the rainbow is a tapestry draped by the hands of the south wind. It is also called the cloud's bow or Allah's bow. In Islam the **rainbow is made** up of four colors red, yellow, green and blue related to the four elements. In myths of India the Goddess Indra not only carries a thunderbolt like the Greek God Zeus but she also carries a ...

Ref:.... true b. false 13. The average speed of light is greatest in _. a. red glass. b. orange glass. c. green glass. d. blue glass. e. is the same in all of these. 14. The secondary **rainbow is produced** with an extra (choose the best answer) a. dispersion. b. reflection. c. refraction. d. diffraction. 15. If a person has green cones that are weak. then yellow light will appear _ to t...

Ref:...ever wonder what makes the color in a rainbow ? The answer is sunlight. it has all of the colors of the rainbow in it, but they are all mixed up together so you are not a ble to see them. The **rainbow is made** up of drops of water. When sunlight passes through a drop of water, it bends and the colors inside the light split apart and are separated so that we can see them. When the sunlight passes through...

[...section deleted...]

Figure 24. NECI meta search engine response for the query How is a rainbow created?

Oinfoseek℠
proof of intelligent life on the net℠

White & Yellow Pages

UPS. Global Services

Infoseek found 20,594,341 pages containing at least one of these words: how is a rainbow created?

Related Topics	Search Results 1 - 10

Hide Summaries I next 10

Hayden Books: Creative Techniques
Creative Techniques brought to you by Hayden Books Working with Layers: Creating a Rainbow Effect Art by Gary Poyssick
Comments: This tip shows you how to use layers and Photoshop's ...
64% http://www.mcp.com/169470081705120/hayden/series/techniques/52/index.html   (Size 4.2K)

Rainbow Sports Networks and The Sporting News Create Alliance
World Data Web Connect InsideMedia August 16, 1996 Rainbow Sports Networks and The Sporting News Create Alliance
Rainbow Programming Holdings' sports networks - NewSport, Prime and ...
64% http://www.mediacentral.com/Magazines/InsideMedia/News/1996081601.htm/Default   (Size 3.9K)

Hayden Books: Creative Techniques
Creative Techniques brought to you by Hayden Books Working with Layers: Creating a Rainbow Effect Art by Gary Poyssick
Comments: This tip shows you how to use layers and Photoshop's ...
64% http://www.mcp.com/18229751149932/hayden/series/techniques/52/index.html   (Size 4.2K)

Rainbow Warriors?
Rainbow Warriors? Hacker All the colors of the rainbow... The appropriate excerpt from the alt.2600 FAQ. You are left on your own recognizance
63% http://www.jhcloos.com/sjgames/hacker/chroma.html   (Size 3.8K)

Pet Loss and Rainbow Bridge
Rainbow Bridge and Pet Loss grief pages, may post poems, photos, tributes or just stop by and be comforted.
62% http://www.primenet.com/~meggie/bridge.htm   (Size 46.2K)

The sky's the limit: student activities
We all see something different when we look up to the sky. The clouds often stir our imagination allowing us to see animated images being formed by those mysterious "puffs of ...
62% http://www.solutions.ibm.com/k12/teacher/cloudss.html   (Size 9.6K)

Asymetrix 3D F/Xtm Drag and Drop 3D for Windows screenshot Create
high-quality, professionally rendered three-dimensional images and animations with Asymetrix 3D F/X. You can easily add dazzling 3-D effects and sophisticated animation to any ...
62% http://3dsite.com/3dsite/cgi/software/asymetrix/3dfx.htm   (Size 6.9K)

Rainbow Video Authoring Services
CD-ROM Authoring and Web Development Services. Not satisfied with offering the best in regional video production, Rainbow Video offers complete CD-ROM authoring services for both the ...
61% http://www.rainbowvideo.com/author.htm   (Size 2.7K)

Bio
Bio [TOC Icon][Feedback Icon] photo by Wink Van Kempen Fred Stern The Rainbow Maker Fred Stern was raised in New York and is an acknowledged innovator in environmental art. He has ...
61% http://www.zianet.com/rainbow/bio.htm   (Size 4.1K)

Oregon Department of Fish and Wildlife Weekly Fishing Report
Oregon Department of Fish and Wildlife. Now sorted by zones!. Updated: August 7, 1997. * Denotes scheduled stocking Zones. Northwest Zone I Southwest Zone I Willamette Zone I ...
60% http://www.dfw.state.or.us/ODFWhtml/RecReports/Fishing.html   (Size 40.5K)

Hide Summaries I next 10

Figure 25. Response of Infoseek for the query How is a rainbow created?

Ref:...k, such that all state memory changes are made with respect to the clock signal. T F A Moore machine usually has less states than an equivalent Mealy machine. T F A potential problem with a **Mealy Machine is** that the output changes are not synchronized with clock changes. Fill in the blanks. 10 points at 2 points per blank The canonical SOP form of an expression results in a level circuit. ...

Ref:... input alphabet and by creating multiple input mechanisms for reading events. Second, the transition function must be modified so that controller tasks can be performed during state transitions. A **Mealy machine is** a DFA that defines symbols which are output during state transitions. For the current purpose, a similar mechanism is used to perform controller tasks such as moving a robot, opening a vise of fi...

Ref:... these general premises to the Collatz conjecture, which of all open problems at the moment is perhaps the most conveniently conducive to the approach. = Generalized Sequential Machines, GSMs A **Mealy machine is** a Finite State Automaton with a single output symbol associated with each state transition (e.g. see [1. p.42]). A GSM or Generalized Sequential Machine is similar it is a FSA with an output strin...

Ref:... next state which then effect the output. (State refers to all latched events and values.) Argument for Mealy is that the output depends on the transition, thus ignoring the buffers, the CFSM is a **Mealy machine.** (Will explore this more later.) Issues concerning compostion have not been resolved by the Polis group, there is no composition as it stands. Resources A Formal Methodology for Hardware/Softwar...

Ref:... State Machines We consider two types of state machines, Moore and Mealy. A Moore machine is a Mealy machine whose output does not directly depend on its input. Mealy Machines A **Mealy Machine is** a 6-tuple M = (S, D, Q, q_0, D(a,q), I(a,q)) where S != 0 is a finite set of input symbols (we will use a to denote a particular input symbol) D != 0 is a finite set...

Ref:...ving on state register flip-flops, it is still desirable to use them. This leads to alternative synchronous design styles for Mealy machines. Simply stated, the way to construct a synchronous **Mealy machine is** to break the direct connection between inputs and outputs by introducing storage elements. One way to do this is to synchronize the Mealy machine outputs with output flip-flops. See Figure 8...

Ref:...itions. A FSA is called non-deterministic if there is one or more transitions from one state to another for a given input. A Moore machine is an FSA which associates an output with each state and a **Mealy machine is** an FSA which associates an output with each transition. The Moore and Mealy FSAs are important in applications of FSAs. Equivalence of deterministic and non-deterministic fsa It might seem ...

Ref:...icle. and you, will make use of this three-block model to describe a state machine in VHDL using our four-step design procedure. Moreover, the outputs of a state machine define its type. That is, a **Mealy machine is** one in which the outputs are a function of both the inputs and the current state-variables (Figure 1). A Moore machine has outputs that are a function of the state-variables only (Figure 2). And a M...

Ref:... 60 Bestudeer van module 1.1 de blz.7 t/m blz.13 grondig. 20 Als u niet (of niet meer zo goed) weet wat een toestandsmachine, een toestandsdiagram, een Moore- of een **Mealy-machine is,** zoek dan wat u niet (meer) weet op in uw boek(en) over digitale techniek. 30. Maak de oefenopdracht van blz.13 10 Lees de rest van module 1.1 oppervlakkig ...

[...section deleted...]

Figure 26. NECI meta search engine response for the query What is a mealy machine?

Home Options Help Suggestions Problems NECI meta search (13674 queries)

Find: [   ]

Web & Usenet Web Usenet Press Images Citations Journals Tech All

(Show) Constraints:
(Hide) Options:

Hits: [50 ▼] Context: [100 ▼] Cluster: [No ▼] Tracking: [No ▼]

Tip: Clicking on the search engine links in the "Searching for:" line will show the search engine response to the current query.

Recently modified URLs:

Page ftp://ftp.kernel.org/pub/linux/kernel/testing/ [Stop tracking URL]

Recent documents matching: signafy [Mark as seen] [Stop tracking query]

INFORMIX-Universal Server Powers Comprehensive Media Asset Management Package From Virage; ... NW n/a 12k
http://www.infoseek.com/Content?arn=BW1674-19970915&qt=signafy&col=NX&nh=25&kt=A&ak=allnews
... Group The Content Group. Excalibur Technologies Corp. Muscle Fish, LLC Silicon Graphics, Inc. Signafy , Inc.
TECHMATH GmbH and TATA Consultancy Services. About INFORMIX-Universal Server INFORMIX-Un...

INFORMIX-Universal Server Powers Comprehensive Media Asset Management II n/a 13k
http://www.infoseek.com/Content?arn=ix.BWIR1997091521525176X&qt=signafy&col=IX&nh=25&kt=A&ak=industrynews
...roup The Content Group. Excalibur Technologies Corp. Muscle Fish, LLC Silicon Graphics, Inc. Signafy , Inc.
TECHMATH GmbH and TATA Consultancy Services. About INFORMIX-Universal Server I...

Today at NECI		
9:00	NJ Prog. Language Workshop - Multipurpose Rooms 2F00 2F01, 2nd Floor, (AW)	
OUT	Ebbesen, Gottlieb, de Ruyter, Thornber.	

Recent articles about NEC Research in the press:

NEC Research Promises Terabit Memory Chips NT n/a 20k http://www.techweb.com:80/wire/news/1997/09/0911nec.html
...NEC Research Promises Terabit Memory Chips ... /... NEC Research Promises Terabit Memory Chips ... /... Chips
International NEC Research Promises Terabit Memory Chips (09/11/97 12:00 p.m. EDT) By John Boyd , ...

[...section deleted...]

Figure 27. Sample home page showing new hits for a query and recently modified URLs.

What's New	Articles	Projects	Publications	Software	Past Work	Directions	Find People

SRC Publications List

1. Paul McJones and John DeTreville. Each to Each programmer's reference manual. Technical Note 1997-023, Digital Equipment Corporation Systems Research Center, Palo Alto, CA, October 1997.

2. Monika Henzinger and Han La Poutre. Certificates and fast algorithms for biconnectivity in fully-dynamic graphs. Technical Note 1997-021, Digital Equipment Corporation Systems Research Center, Palo Alto, CA, September 1997.

3. Monika Henzinger. Improved data structures for fully dynamic biconnectivity. Technical Note 1997-020, Digital Equipment Corporation Systems Research Center, Palo Alto, CA, September 1997.

4. Monika Henzinger and Valerie King. Maintaining minimum spanning trees in dynamic graphs. Technical Note 1997-019, Digital Equipment Corporation Systems Research Center, Palo Alto, CA, September 1997.

5. Marc Brown, Marc A. Najork, and Roope Raisamo. **A Java-based implementation of Collaborative Active Textbooks**. In *1997 IEEE Symposium on Visual Languages*, pages 372-379. IEEE Computer Society, September 1997. (PDF), (PostScript), (Copyright 1997 IEEE).

[...section deleted...]

Figure 28. Sample page view showing the text which has been added to the page since the last time it was viewed.
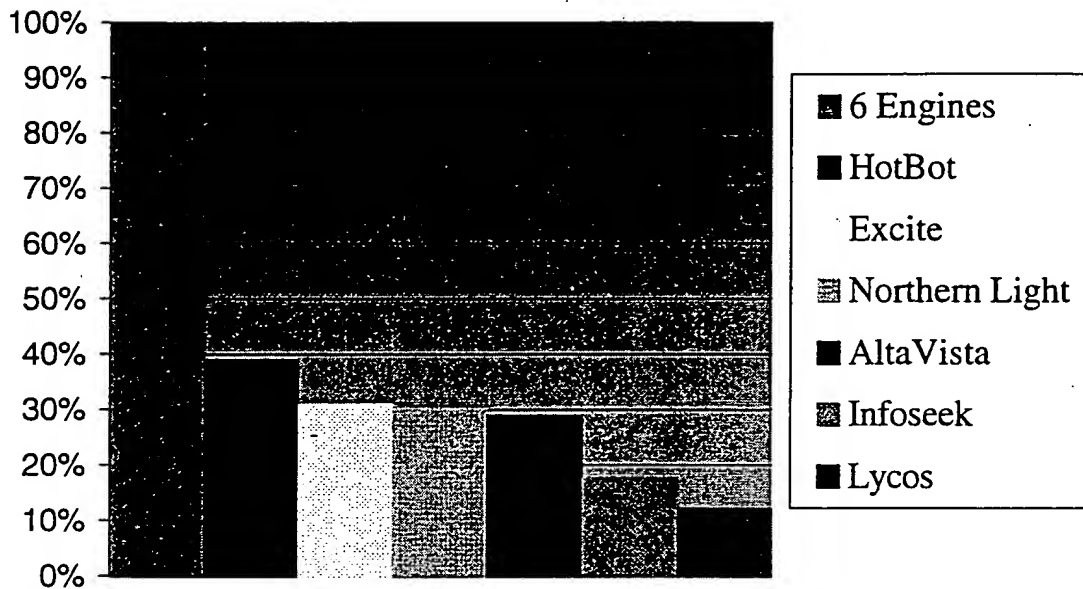
Coverage WRT 6 Engine Total

Figure 29. Coverage of each engine with respect to the combined coverage of all 6 (averaged over 500 queries).
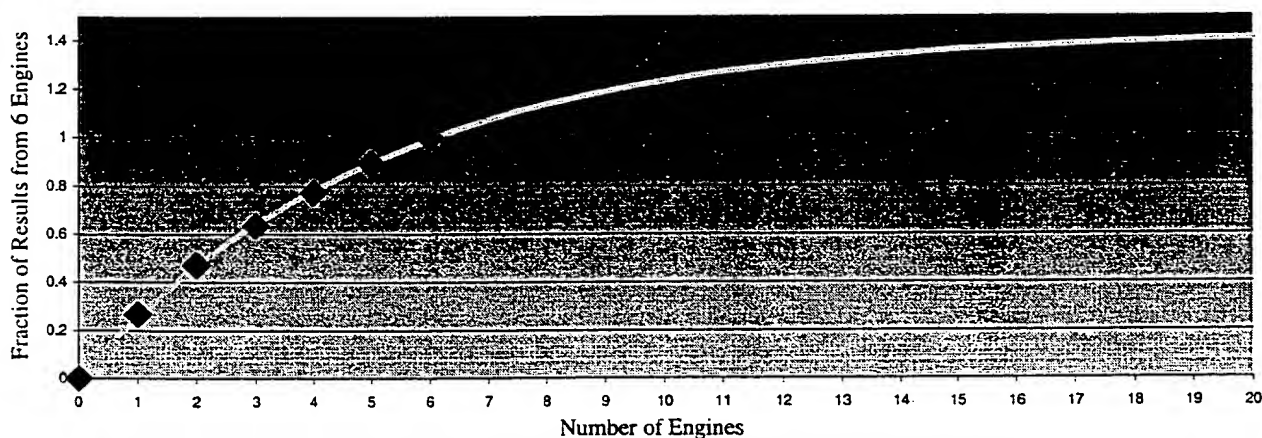

Figure 30. Coverage as the number of search engines is increased (averaged over 500 queries). The extrapolation is created using the assumption that the coverage increases logarithmically with the number of search engines. Significantly more documents are returned as the number of search engines is increased.
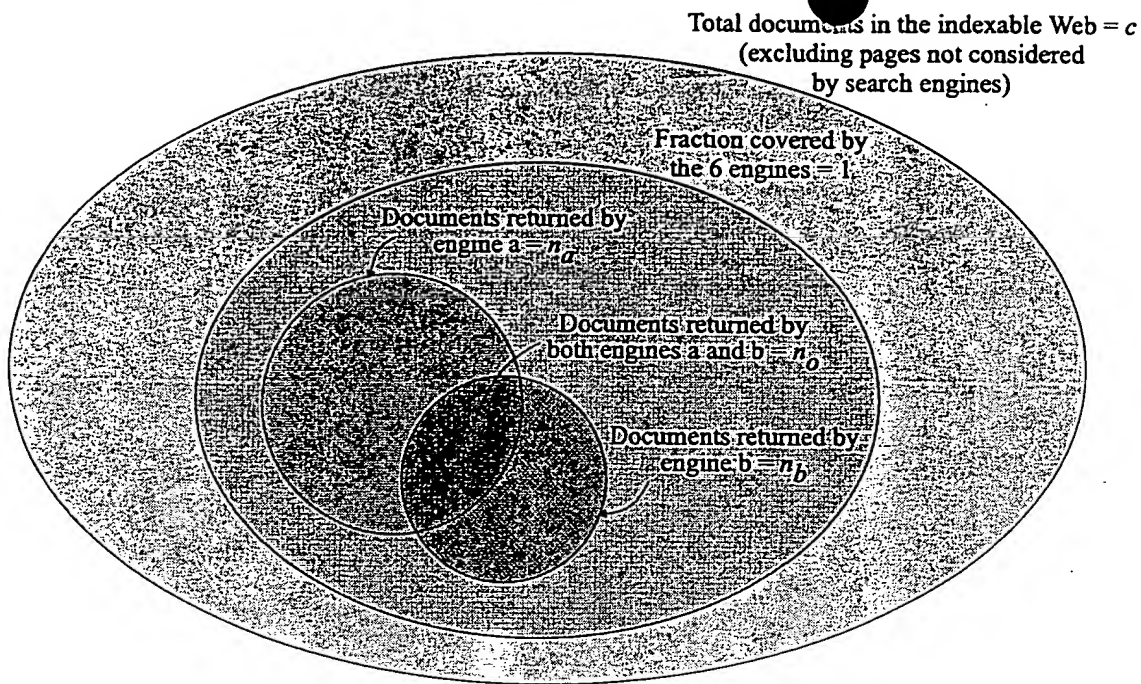
Figure 31. In order to estimate the size of the indexable Web (the Web excluding pages not considered by the search engines), we compare the overlap between engines to the number of documents returned from all 6 engines combined.
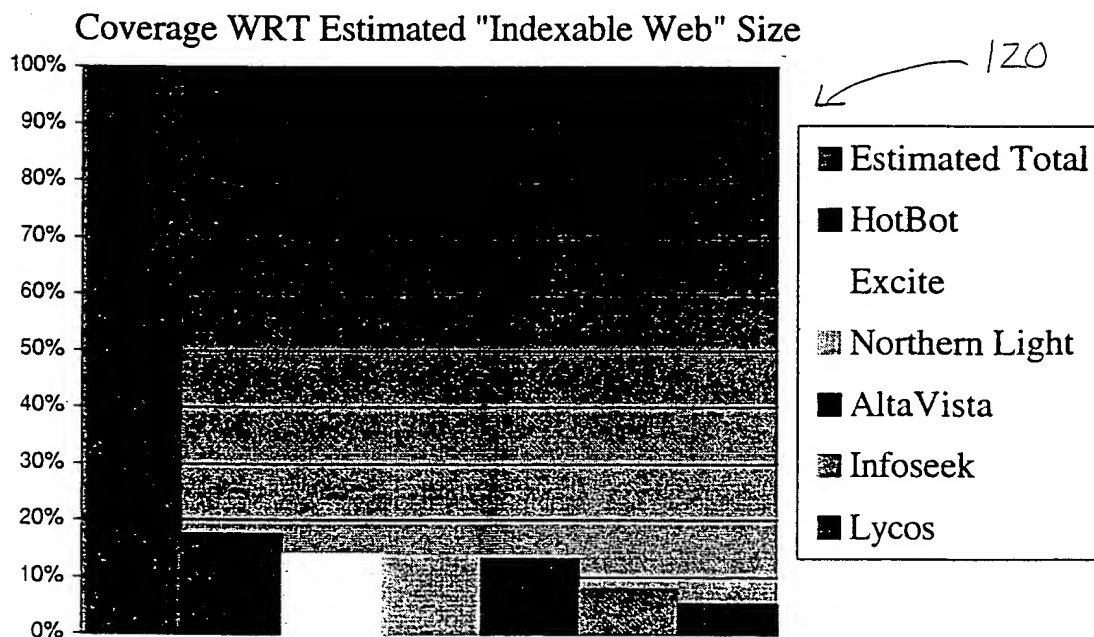

Figure 32. Coverage of each engine with respect to the estimated size of the indexable Web (the estimate is expected to be lower than the true value).
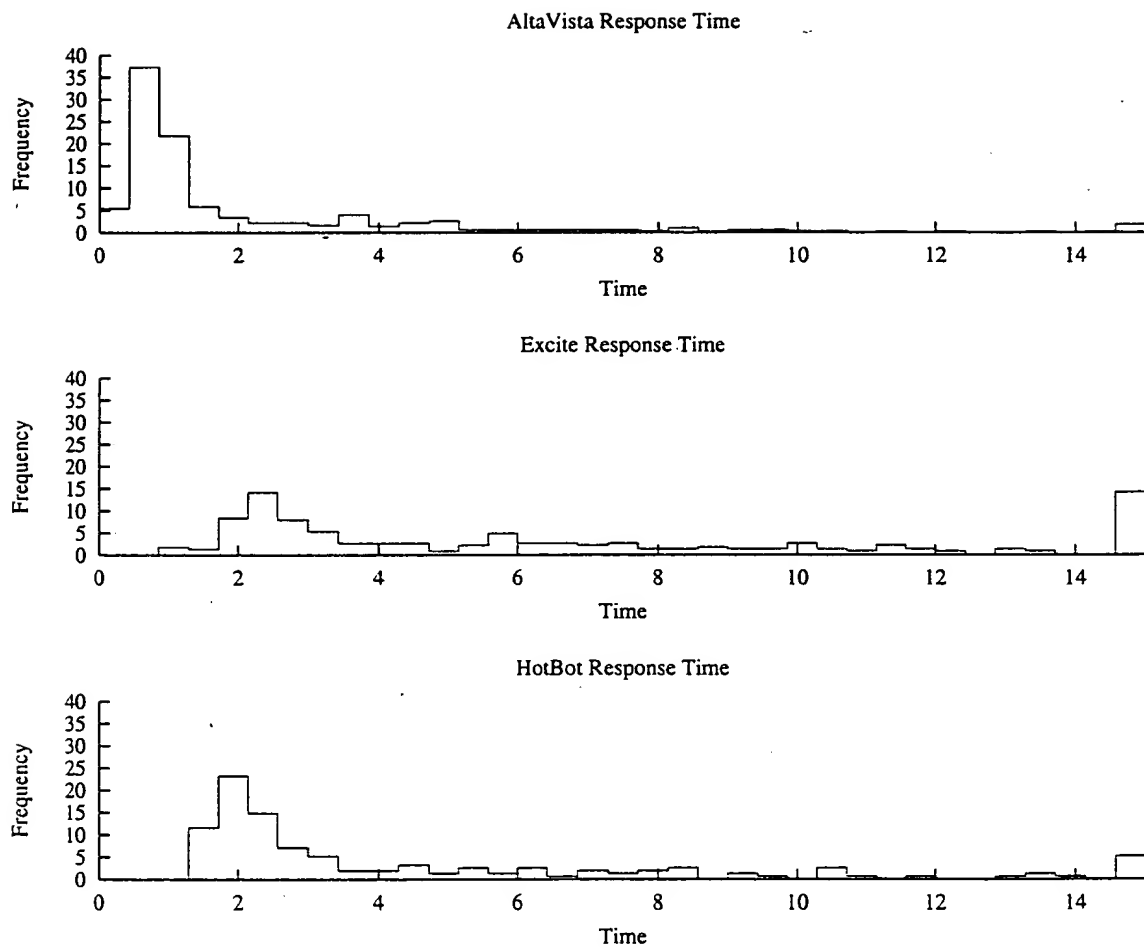
AltaVista Response Time

Excite Response Time

HotBot Response Time

Figure 33. Histograms of the major search engine response times, continued in the next figure.

Infoseek Response Time

Frequency — Time (0, 2, 4, 6, 8, 10, 12, 14)

Lycos Response Time

Frequency — Time (0, 2, 4, 6, 8, 10, 12, 14)

Northern Light Response Time

Frequency — Time (0, 2, 4, 6, 8, 10, 12, 14)

Response Time for the First of 6 Web Search Engines
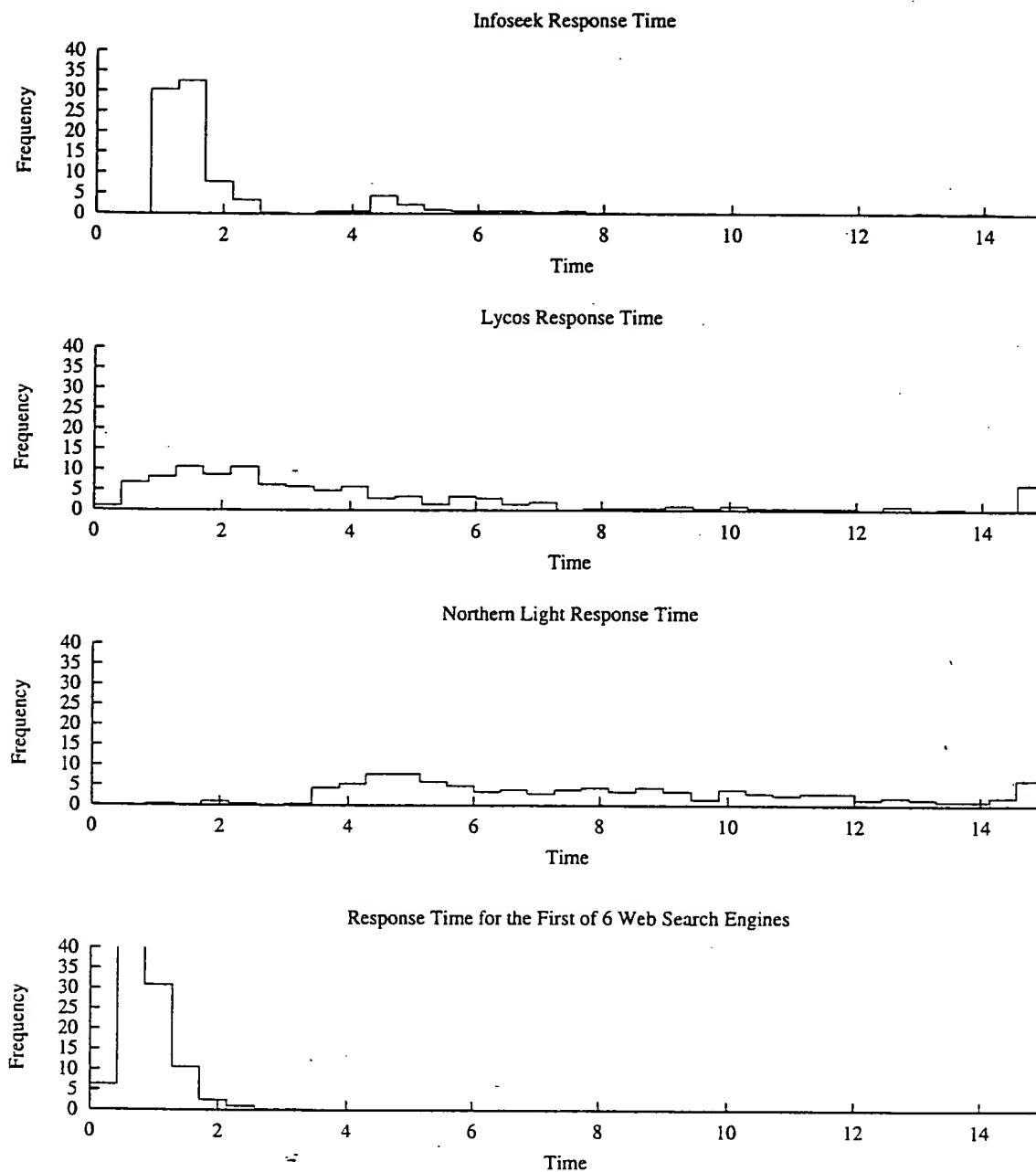

Frequency — Time (0, 2, 4, 6, 8, 10, 12, 14)

Figure 34. (Continued from the previous figure) Histograms of the major search engine response times (above, in seconds), and a histogram of the response time for the first response when queries are made to the six engines simultaneously (below, created from 10,000 samples drawn from the previous distributions). The frequency is normalized so that it represents the percentage of responses that fall within each section of the histogram. The last section of the histograms also contains all samples with longer times.

Median Response Time

Figure 35. Median time for the Web search engines to respond.

Median Time for the First of n Web Search Engines to Respond

Figure 36. Median time for the first of n Web search engines to respond.
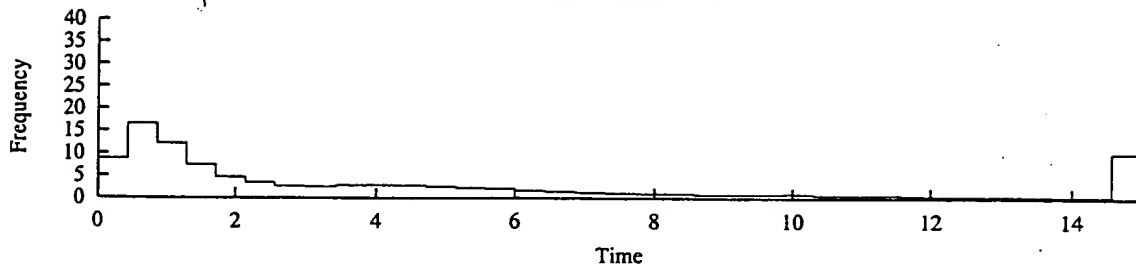
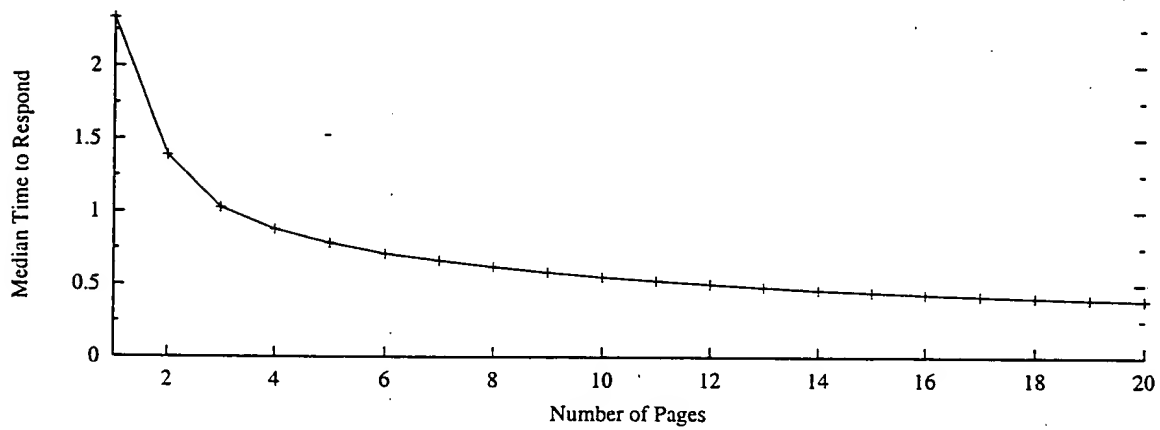Figure 37. Response time for arbitrary Web pages.

Figure 38. Median time to download the first of n pages requested simultaneously.

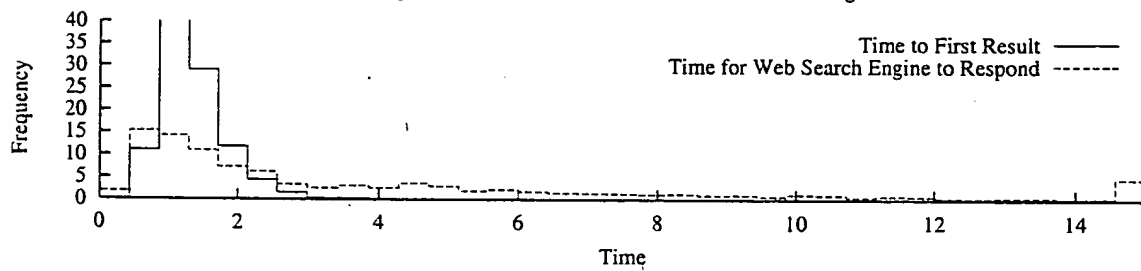Response Time for the First Result from the Meta Engine

Figure 39. Time for the meta engine to display the first result.